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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,528	05/15/2001	Toru Suzuki	00653/01-F-011US/UA	8224

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EXAMINER

HOFFMANN, JOHN M

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 10/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/854,528

Applicant(s)

SUZUKI ET AL.

Examiner

John Hoffmann

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2006 and 30 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 and 13 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility.

See prior Office action.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

See prior Office action.

Claims 1 and 13 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. Adjustment of the solid content is critical or essential

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to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). See the first page of the supplement response filed 20 August 2006 in which applicant admits that it is "necessary to adjust the solid content of the slurry". Since the claims omit this critical step, the method which does not include the step is not enabled.

### ***Claim Rejections - 35 USC § 103***

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 and 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Topchiashvili 6010983 in view of Wei 5518660.

See prior Office action.

As to the newly claimed A, B or C: see Wei, col. 5, lines 50-67 which discloses a 35 vol. % solids and various average particle sized (e.g. 0.2 micron). These two conditions fall within the requirements of part B of claim 1.

Claim 1 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Topchiashvili 6010983 and Takagi 4996177.

See prior Office action. As to the newly claims A, B and C: see Example 1 of Takagi. Given the 100 parts by weight alumina: 100 grams of alumina has a volume of about 25.2 cc, because alumina has a density of 3.97 gram/cc. 28 grams of the aqueous solution would have a volume of about 28 cc. Thus the solid content would be  $25.2 / (25.2 + 28) = 47\%$  which is in the range of part C of claim 1. As per col. 6, lines 15-16: the average of the two dimensions (1.0 micron and 0.2 micron) would be 0.6 micron.

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Thus it would be an average particle size that is larger than 0.4 micron and less than 1 micron.

Claims 1 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morita 4937214.

See prior Office action. As to the new A, B or C requirement, Morita only discloses the particle size – see examples 1-3: they fall within the range of B). There is no mention of the amount of liquid used. It would have been obvious to utilize the amount of paraffin necessary perform the process, but not any more than reasonably necessary. Obviously, the more paraffin used would mean the more cost for the raw material and extra effort/time to remove and dispose of it.

### ***Response to Arguments***

Applicant's arguments filed 7-28/2006 and 8-30/2006 have been fully considered but they are not persuasive.

It is argued that the prior art does not disclose adjustment of the solid content of the slurry. This does not appear to be very relevant because the claims do not require a step of adjustment.

Regarding Applicant's admission that orientation is only possible with Topshiashvili's ceramics: it is argued that when the admission when taken in context with other arguments, it is apparent that Applicants are not admitting the invention won't work. This is not convincing because this essentially contradicts the assertion the "only

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possible" admission by Applicant. In other words: Applicant is arguing that Applicant's prior words do not mean what they actually say, rather, one has to interpret them in light of other comments. The Office takes all statements at face value. The Office would be at a complete loss as to what applicant's argument actually mean if they are not taken at face value – i.e. if they have to be re-interpreted in light of other comments.

Applicant also points out that page 14 of the specification indicates that oriented sintered product was obtained. Applicant does not point to specific line numbers on page 14, so examiner is uncertain as whether Examiner is considering the correct portion. Examiner sees nothing on page 14 which indicates that the orientation was created by the magnetic field. It could be coincidence. Examiner understands that slip casting without a magnetic field causes particle orientation. Examiner sees nothing on page 14 which contradicts applicant's admission that the invention does not work.

As to the affidavit: the relevance is not understood. Whereas the arguments point to the affidavit, there is no discussion of its relevance except that it is evidence.

**From MPEP 716.02(b) [R-2] Burden on Applicant:**

II. >> APPLICANTS HAVE BURDEN OF EXPLAINING PROFFERED DATA

"[A]ppellants have the burden of explaining the data in any declaration they proffer as evidence of non-obviousness." Ex parte Ishizaka, 24 USPQ2d 1621, 1624 (Bd. Pat. App. & Inter. 1992).

It is also argued that claim 1 defines over the prior art because it encompasses the invention of cancelled claim 14. Examiner disagrees, prior claim 14 required three adjusting steps, A, B and C. Claim 1 only requires one of the three – and none need be an adjusting step.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

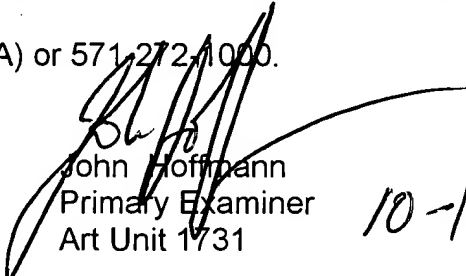
Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
John Hoffmann  
Primary Examiner  
Art Unit 1731

10-18-06

Jmh